

Serial No.: 10/678,689  
Reply to Office Action of: 1/26/2006  
Atty. Docket No.: JJK-0330 (P2002J098)

### LISTING OF CLAIMS

1. (currently amended )            A process for preparing a lubricating oil basestock having a VI of at least about 135 which comprises:
- (1) hydrotreating a lubricating oil feedstock having a wax content of at least about 60 wt.%, based on feedstock, with a hydrotreating catalyst under effective hydrotreating conditions such that less than 5 wt.% of the feedstock is converted to 650°F (343°C) minus products to produce a hydrotreated feedstock whose VI increase is less than [4] 3 greater than the VI of the feedstock;
- (2) stripping the hydrotreated feedstock to separate gaseous from liquid product; and
- (3) hydrodewaxing the liquid product with a dewaxing catalyst which is at ~~least one of ZSM-48, ZSM-57, ZSM-23, ZSM-22, ZSM-35, ferrierite, ECR-42, ITQ-13, MCM-71, MCM-68, beta, fluorided alumina, silica-alumina or fluorided silica-alumina~~ under catalytically effective hydrodewaxing conditions wherein the dewaxing catalyst contains at least one of Pt or Pd and hydrodewaxing produces a dewaxed product having a pour point of -17°C or less. ~~Group 9 or Group 10 noble metal.~~
2. (original )            The process of claim 1 wherein the hydrotreating catalyst contains at least one Group 6, Group 9 or Group 10 metal.
3. (original )            The process of claim 1 wherein the hydrotreating conditions include a temperature of from 150-400°C, a pressure of from 1480-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 89-1780 m<sup>3</sup>/m<sup>3</sup>.

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4. (cancelled )

5. (cancelled )

6. (cancelled )

7. (original )        The process of claim 1 wherein hydrodewaxing conditions include a temperature of from 250-400°C, a pressure of from 791-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 45-1780 m<sup>3</sup>/m<sup>3</sup>.

8. (original )        The process of claim 1 wherein the dewaxing catalyst is sulfided, reduced, or sulfided and reduced.

9. (original )        The process of claim 1 wherein hydrodewaxed liquid product from step (3) is hydrofinished under effective hydrofinishing conditions.

10. (original )       The process of claim 9 wherein the hydrofinishing includes a hydrofinishing catalyst containing at least one Group 6, Group 9 or Group 10 metal.

11. (original )       The process of claim 9 wherein the hydrofinishing includes a hydrofinishing catalyst which is a mesoporous catalyst from the M41S family.

12. (original )       The process of claim 11 wherein the hydrofinishing catalyst contains at least one noble metal.

13. (currently amended )    A process for preparing a lubricating oil basestock having a VI of at least about 125 which comprises:

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(1) hydrotreating a lubricating oil feedstock having a wax content of at least about 50 wt.%, based on feedstock, with a hydrotreating catalyst under effective hydrotreating conditions such that less than 5 wt.% of the feedstock is converted to 650°F (343°C) minus products to produce a hydrotreated feedstock to produce a hydrotreated feedstock whose VI increase is less than [4] 3 greater than the VI of the feedstock;

(2) stripping the hydrotreated feedstock to separate gaseous from liquid product;

(3) hydrodewaxing the liquid product with a dewaxing catalyst which is at least one of ZSM-22, ZSM-23, ZSM-35, ~~ferrierite~~, ZSM-48, ZSM-57, ECR-42, ITQ-13, MCM-68, MCM-71, beta, ~~fluorided alumina, silica-alumina or fluorided silica-alumina~~ under catalytically effective hydrodewaxing conditions wherein the dewaxing catalyst contains at least one ~~Group 9 or 10 noble metal~~; of Pt or Pd and hydrodewaxing produces a dewaxed product having a pour point of -17°C or less, and

(4) hydrofinishing the product from step (3) with a mesoporous hydrofinishing catalyst from the M41S family under hydrofinishing conditions.

14. (original ) The process of claim 13 wherein the hydrotreating conditions include a temperature of from 150-400°C, a pressure of from 1480-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 89-1780 m<sup>3</sup>/m<sup>3</sup>.

15. (cancelled )

16. (cancelled )

17. (cancelled )

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18. (original ) The process of claim 13 wherein hydrodewaxing conditions include a temperature of from 250-400°C, a pressure of from 91-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 45-1780 m<sup>3</sup>/m<sup>3</sup>.

19. (original ) The process of claim 13 wherein the M41S family includes MCM-41, MCM-48 and MCM-50.

20. (original ) The process of claim 19 wherein the M41S family is MCM-41.

21. (original ) The process of claim 13 wherein hydrofinishing conditions include a temperature of from 150-350°C, a pressure of from 2889-20786 kPa, a liquid hourly space velocity from 0.1-5 hr<sup>-1</sup> and a hydrogen treat rate of 45-1780 m<sup>3</sup>/m<sup>3</sup>.

22. (original ) The process of claim 13 wherein the dewaxing catalyst is sulfided, reduced, or sulfided and reduced.

23. (original ) The process of claim 13 wherein the hydrotreating catalyst contains at least one Group 6, Group 9 or Group 10 metal.

24. (original ) The process of claim 13 wherein the hydrofinishing catalyst contains at least one noble metal.

25. (original ) The process of claim 24 wherein the noble metal is at least one of Pt or Pd.

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26. (currently amended) A process for preparing a lubricating oil basestock having a VI of at least about 135 which comprises:

(1) hydrotreating a lubricating oil feedstock having a wax content of at least about 60 wt.%, based on feedstock, with a hydrotreating catalyst under effective hydrotreating conditions such that less than 5 wt.% of the feedstock is converted to 650°F (343°C) minus products to produce a hydrotreated feedstock to produce a hydrotreated feedstock whose VI increase is less than [4] 3 greater than the VI of the feedstock;

(2) stripping the hydrotreated feedstock to separate gaseous from liquid product;

(3) hydrodewaxing the liquid product with a dewaxing catalyst which is ZSM-48 under catalytically effective hydrodewaxing conditions wherein the dewaxing catalyst contains at least one of Pt or Pd ~~Group 9 or 10 noble metal~~; and wherein hydrodewaxing produces a 370°C+dewaxed product in a yield of greater than 50 wt.%, based on feed to the hydrodewaxing and having a pour point of -17°C or less, and

(4) hydrofinishing the product from step (3) with MCM-41 under hydrofinishing conditions wherein hydrofinished product has an aromatics content of about zero.

27. (original ) The process of claim 26 wherein the hydrotreating conditions include a temperature of from 150-400°C, a pressure of from 1480-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 89-1780 m<sup>3</sup>/m<sup>3</sup>.

28. (cancelled )

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29. (original )        The process of claim 26 wherein the dewaxing catalyst is sulfided, reduced, or sulfided and reduced.
30. (original )        The process of claim 26 wherein hydrodewaxing conditions include a temperature of from 250-400°C, a pressure of from 791-20786 kPa, a liquid hourly space velocity from 0.1-10 hr<sup>-1</sup> and a hydrogen treat rate of 45-1780 m<sup>3</sup>/m<sup>3</sup>.
31. (original )        The process of claim 26 wherein hydrofinishing conditions include a temperature of from 150-350°C, a pressure of from 2889-20786 kPa, a liquid hourly space velocity from 0.1-5 hr<sup>-1</sup> and a hydrogen treat rate of 45-1780 m<sup>3</sup>/m<sup>3</sup>.
32. (original )        The process of claim 26 wherein the feedstock wax content is at least about 75 wt.%.
33. (original )        The process of claim 26 wherein MCM-41 contains at least one of Pt or Pd.